# Dart Aerospace Ltd.

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Date: Thursday, 7/19/2007 2:16:33 PM
User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services
Job Number : 33621
Estimate Number : 10307
P.O. Number : N/A
This Issue : 7/19/2007 S.O. No. : N/A
Prsht Rev. : NC
First Issue : N/A Type : LANDING GEAR
Previous Run : 33620
Written By :
Checked & Approved By : KJ 07.07.19
Comment : Est Rev:B 05.09.23 Revised per D206-642 Rev. J KJ/JLM
Est Rev:C 07-02-23 As per IIN D206-642 Rev K JLM
est rev D 07.06.06 added K642-511 EC

Drawing Name : FLOAT SKID LH 206L1,L3,L4&407
Part Number : D206642511
Drawing Number : N/A
Project Number : N/A
Drawing Revision : K
Material : N/A
Due Date : 8/10/2007 Qty: 1 Um: Each

Additional Product

Job Number:

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 1.0 | DC | DOCUMENT CONTROL |

Comment: DOCUMENT CONTROL
Photocopy bluefile and create labels per PPP D206-642-511CHG003 KS 07.07.30 (1)

| 2.0 | 33621A | FLOAT SKIDTUBE ASSEMBLY |
|---|---|---|

Comment: Sub-Component FLOAT SKIDTUBE ASSEMBLY
D206-642-541 B 33621A 7/8/25 SØ

| 3.0 | PACKAGING 1 | PACKAGING RESOURCE #1 |
|---|---|---|

Comment: PACKAGING RESOURCE #1
Pick Packing Kit

| 4.0 | K642 511 | saddle kit 642-511 |
|---|---|---|

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
saddle kit 642-511
Batch: 33664 7/8/25 SØ

| 5.0 | QC4 | INSPECT 100% KITS FOR COMPLETENESS |
|---|---|---|

Comment: INSPECT 100% KITS FOR COMPLETENESS C 07/08/25 (1)


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| W/O: | WORK ORDER CHANGES | | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

**Part No:** ________ **PAR #:** ______ **Fault Category:** ________ **NCR:** Yes (No) **DQA:** [signature] **Date:** 07/18/07

**QA: N/C Closed:** _____ **Date:** _________

| NCR: | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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**NOTE:** Date & initial all entries

Date: Thursday, 7/19/2007 2:16:33 PM
User: Kim Johnston

# Process Sheet

**Customer:** CU-DAR001 Dart Helicopters Services

**Drawing Name:** FLOAT SKID LH 206L1,L3,L4&407

**Job Number:** 33621

**Part Number:** D206642511

Job Number:

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 6.0 | PACKAGING 1 | PACKAGING RESOURCE #1 |

**Comment:** PACKAGING RESOURCE #1
Identify and pack for shipping as per PPP D206-642-511
Location: 33621A 7/8/25 SP

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 7.0 | QC21 | FINAL INSPECTION/W/O RELEASE |

**Comment:** FINAL INSPECTION/W/O RELEASE 07/08/07

Job Completion

07.08.27

B33621A



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| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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**Part No:** ____________________ **PAR #:** _______ **Fault Category:** ________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

**QA: N/C Closed:** _____ **Date:** _________

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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**NOTE:** Date & initial all entries

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# Dart Aerospace Ltd.

32

Date: Thursday, 7/19/2007 2:17:10 PM
User: Kim Johnston

## Process Sheet

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|---|---|---|---|---|
| Customer | : CU-DAR001 Dart Helicopters Services | | Drawing Name | : FLOAT SKIDTUBE ASSEMBLY |
| Job Number | : 33621A | | | |
| Estimate Number | : 10309 | | | |
| P.O. Number | : N/A | | Part Number | : D206642541 |
| This Issue | : 7/19/2007 | S.O. No. : N/A | Drawing Number | : D3274 REV D |
| Prsht Rev. | : NC | | Project Number | : N/A |
| First Issue | : N/A | Type : LANDING GEAR | Drawing Revision | : D |
| Previous Run | : 33620A | | Material | N/A |
| Written By | : | | Due Date | : 8/10/2007 Qty: 1 Um: Each |
| Checked & Approved By | : 07.07.19 | | | |
| Comment | : Est Rev:B 05.09.23 Revised per D206-642 Rev. J KJ/JLM<br>Est Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM | | | |

**Additional Product**

Job Number:

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 1.0 | DC | DOCUMENT CONTROL |

Comment: DOCUMENT CONTROL
Photocopy bluefile & type labels per PPP D206-642-541 CHG003 N/A

| | | |
|---|---|---|
| 2.0 | D26001190 | Extrusion Round 3" 206 |

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Pick:

| Qty | Part Number | Description | Batch |
|---|---|---|---|
| 1 | D2600-1-190 | 3" OD Tube | B24841 |

DP 7-7-23

| | | |
|---|---|---|
| 3.0 | LANDING GEAR 1 | LANDING GEAR RESOURCE 1 |

Comment: LANDING GEAR RESOURCE 1

1-Cut D2600-1 to 190.00" in length as per Dwg D3274 and Deburr ends

2-Drill #40 Aft cap pilot hole using DT8025

3-Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D. Drill 3/16" pilot holes as per Dwg D3274

4-Remove inner indexing ridge on aft end of skidtube as per Dwg D3274

5-Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

DP 7-7-23



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| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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**Part No:** ______________________ **PAR #:** _______ **Fault Category:** ___________________ **NCR:** Yes No **DQA:** _____ **Date:** __________

**QA: N/C Closed:** _____ **Date:** __________

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Corrective Action Section B | | | | | |
| DATE | STEP | Description of NC Section A | Initial Chief Eng | Action Description Chief Eng | Sign & Date | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | | | | | | |
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**NOTE:** Date & initial all entries

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Date: Thursday, 7/19/2007 2:17:10 PM
User: Kim Johnston

# Process Sheet

**Customer:** CU-DAR001 Dart Helicopters Services
**Drawing Name:** FLOAT SKIDTUBE ASSEMBLY

**Job Number:** 33621A
**Part Number:** D206642541

Job Number:

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 4.0 | HAND FINISHING1 | HAND FINISHING RESOURCE #1 |

**Comment:** HAND FINISHING RESOURCE #1
Acid Etch and Alodine tube as per QSI 005 4.1 — 7-7-23

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 5.0 | QC3 | INSPECT POWDER COAT/CHEMICAL CONVERSION |

**Comment:** INSPECT POWDER COAT/CHEMICAL CONVERSION — 07/07/23

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 6.0 | QC5 | INSPECT WORK TO CURRENT STEP |

**Comment:** INSPECT WORK TO CURRENT STEP — 07/07/23

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 7.0 | D3282041 | I-Beam |

**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) — 7-7-24
Pick:

| Qty | Part Number | Description | Batch |
|---|---|---|---|
| 1 | D3282-041 | Float Web | B33656 |

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 8.0 | LANDING GEAR 1 | LANDING GEAR RESOURCE 1 |

**Comment:** LANDING GEAR RESOURCE 1

1-Open Ø0.313" crossbolt spacer holes using DT8743 as per Dwg D3274

2-Open Ø0.375" crossbolt spacer holes using DT8744 as per Dwg D3274 — 7-7-24

3-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube

4-Bond web in place as per Dwg D3274 & QSI 015. — 7-7-24
A/R Sikaflex-291 M104732
Sikaflex expire date: 8-1-1
Start: 11:30 Time: 7-7-24
Finish: 11:30 Time: 7-7-25
(Adhere for 12 hours)

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 9.0 | QC5 | INSPECT WORK TO CURRENT STEP |

All Pins go through and Aling -

**Comment:** INSPECT WORK TO CURRENT STEP — 07/07/25

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| W/O: | WORK ORDER CHANGES | | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

**Part No:** ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** ________

**QA: N/C Closed:** _____ **Date:** ________

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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**NOTE:** Date & initial all entries

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Date: Thursday, 7/19/2007 2:17:10 PM
User: Kim Johnston

# Process Sheet

Customer: CU-DAR001 Dart Helicopters Services
Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 33621A
Part Number: D206642541

Job Number:

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 10.0 | LANDING GEAR 1 | LANDING GEAR RESOURCE 1 |

Comment: LANDING GEAR RESOURCE 1

1-Bend tube using program D3274 as per Dwg D3274. Install drop pins in cross bolt spacer holes to maintain web position.

2-Cut Fwd end of tube to length as per Dwg D3274

3-Remove inner indexing ridge on Fwd end of skidtube as per Dwg D3274

4- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2
OPEN HOLES TO .297"

5-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD END OF TUBE
DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)
REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES

6- Countersink crossbolt spacer holes as per Dwg D3274

7-7-25 EL/BB
DP 7-7-25

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 11.0 | QC5 | INSPECT WORK TO CURRENT STEP |

Comment: INSPECT WORK TO CURRENT STEP BE 07-07-25

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 12.0 | D32851 | Cap |

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Pick:

| Qty | Part Number | Description | Batch | |
|---|---|---|---|---|
| 1 | D3285-1 | Fwd Cap | B33374 | BE 07-07-25 |

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 13.0 | D2649 | Crossbolt Spacer |

Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)
Pick:

| Qty | Part Number | Description | Batch | |
|---|---|---|---|---|
| 12 | D2649 | Crossbolt spacer | 331926 | BE 07-07-25 |



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| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: ____________________ PAR #: _______ Fault Category: __________________ NCR: Yes No DQA: _____ Date: _________

QA: N/C Closed: _____ Date: _________

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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**NOTE:** Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevD

Date: Thursday, 7/19/2007 2:17:10 PM
User: Kim Johnston

# Process Sheet

**Customer:** CU-DAR001 Dart Helicopters Services

**Drawing Name:** FLOAT SKIDTUBE ASSEMBLY

**Job Number:** 33621A

**Part Number:** D206642541

Job Number:

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 14.0 | D32751 | Crossbolt Spacer |

**Comment:** Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)
Pick:
Qty Part Number Description Batch
12 D3275-1 Crossbolt spacer B 32476 BE 07-07-25

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 15.0 | LANDING GEAR 1 | LANDING GEAR RESOURCE 1 |

**Comment:** LANDING GEAR RESOURCE 1

1-Weld Fwd Cap as per Dwg D3274 and QSI 004. Use aluminum rod.
A/R Aluminum Rod m 104221 / m104907 BE 07-07-25

2-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod
A/R Aluminum Rod ~~m104907~~ m104221 BE 07-07-25

3-Grind welds flush to Fwd cap on top surface only.

4-Grind cross bolt welds flush as per Dwg D3274. Masking Tape access to inside of the skidtube

5-Counterbore 5/16" x 0.750" deep as per Dwg D3274. Use DT8743 visual aid Jig and deburr.

7-7-30

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 16.0 | QC5 | INSPECT WORK TO CURRENT STEP |

**Comment:** INSPECT WORK TO CURRENT STEP 07/7/30

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 17.0 | QC9 | VISUAL WELDING INSPECTION |

**Comment:** VISUAL WELDING INSPECTION 07/07/30

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 18.0 | POWDER COATING | POWDER COATING |

M105068 (1X)

**Comment:** POWDER COATING
Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3 07/08/07 PRESSURE WASH BR 07-08-07

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 19.0 | QC3 | INSPECT POWDER COAT/CHEMICAL CONVERSION |

**Comment:** INSPECT POWDER COAT/CHEMICAL CONVERSION 07/08/08 (1)



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| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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**Part No:** ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

**QA: N/C Closed:** _____ **Date:** _________

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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**NOTE:** Date & initial all entries

Date: Thursday, 7/19/2007 2:17:10 PM
User: Kim Johnston

# Process Sheet

Customer: CU-DAR001 Dart Helicopters Services
Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 33621A
Part Number: D206642541

Job Number:

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 20.0 | D3415041 | Nut Plate |

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Pick:

| Qty | Part Number | Description | Batch |
|---|---|---|---|
| 1 | D3415-041 | Nut Plate | B26776 |

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 21.0 | CCR264SS33 | Cherry Rivet |

Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
Pick:

| Qty | Part Number | Description | Batch |
|---|---|---|---|
| 2 | CCR264SS3-3 | Rivet | M103525 |

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 22.0 | CR3212403 | Cherry Rivet |

Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
Pick:

| Qty | Part Number | Description | Batch |
|---|---|---|---|
| 2 | CR3212-4-03 | Rivet | M15915 |

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 23.0 | ALS71032130 | Insert |

Comment: Qty.: 78.0000 Each(s)/Unit Total : 78.0000 Each(s)
Insert
Batch: M102475

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 24.0 | HAND FINISHING1 | HAND FINISHING RESOURCE #1 |

Comment: HAND FINISHING RESOURCE #1

1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets.
A/RN/ALPS-3 M105085

2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a
A/R Sikaflex-291 M104989
Sikaflex expire date: 08-01

07-08-08 - (1)

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| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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**Part No:** ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

**QA: N/C Closed:** _____ **Date:** _________

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
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# Process Sheet

**Customer:** CU-DAR001 Dart Helicopters Services

**Drawing Name:** FLOAT SKIDTUBE ASSEMBLY

**Job Number:** 33621A

**Part Number:** D206642541

Job Number:

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 25.0 | QC5 | INSPECT WORK TO CURRENT STEP |
| | **Comment:** INSPECT WORK TO CURRENT STEP<br>Inspect Nut Plate & Inserts | En 07/08/08 (1) |
| 26.0 | AN3C4A | BOLT |
| | **Comment:** Qty.: 80.0000 Each(s)/Unit Total : 80.0000 Each(s)<br>BOLT<br>Batch: M103154 | MJ |
| 27.0 | D353515 | WEARSHOE |
| | **Comment:** Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)<br>WEARSHOE<br>Batch: B 30750 | MJ * ? |
| 28.0 | D353523 | WEARSHOE |
| | **Comment:** Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)<br>WEARSHOE<br>Batch: B 32411 | MJ |
| 29.0 | D353535 | WEARSHOE |
| | **Comment:** Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)<br>WEARSHOE<br>Batch: B 32736 | MJ |
| 30.0 | D353539 | WEARSHOE |
| | **Comment:** Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)<br>WEARSHOE<br>Batch: ~~B32[illegible]~~ B 33629 | MJ |
| 31.0 | D353615 | GASKET |
| | **Comment:** Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)<br>GASKET<br>Batch: B ~~32647~~ 32746 | MJ 09-08-08 - (1) |



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| W/O: | WORK ORDER CHANGES | | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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**Part No:** ________________ **PAR #:** ______ **Fault Category:** ________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

**QA: N/C Closed:** _____ **Date:** _________

| NCR: | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
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# Process Sheet

Customer: CU-DAR001 Dart Helicopters Services
Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 33621A
Part Number: D206642541

Job Number:

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 32.0 | D353623 | GASKET |

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
GASKET
Batch: B 32743 MJ

| 33.0 | D353635 | GASKET |
|---|---|---|

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
GASKET
Batch: B 33659 MJ

| 34.0 | D353639 | GASKET |
|---|---|---|

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
GASKET
Batch: B32905 MJ

| 35.0 | D35371 | WEARPAD |
|---|---|---|

Comment: Qty.: 9.0000 Each(s)/Unit Total : 9.0000 Each(s)
WEARPAD
Batch: B 33660 MJ

| 36.0 | D35373 | WEARPAD |
|---|---|---|

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
WEARPAD B 32789 MJ

| 37.0 | AN960C10L | washer |
|---|---|---|

Comment: Qty.: 80.0000 Each(s)/Unit Total : 80.0000 Each(s)
Pick:

| Qty | Part Number | Description | Batch |
|---|---|---|---|
| 80 | AN960C10L | Washer | M105 143 MJ |

| 38.0 | NAS1515H3L | WASHER |
|---|---|---|

Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
Pick:

| Qty | Part Number | Description | Batch |
|---|---|---|---|
| 2 | NAS1515H3L | Washer | M104603 MJ 07.08.08 |



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|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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**Part No:** ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

**QA: N/C Closed:** _____ **Date:** _________

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

**NOTE:** Date & initial all entries

Date: Thursday, 7/19/2007 2:17:10 PM
User: Kim Johnston

# Process Sheet

**Customer:** CU-DAR001 Dart Helicopters Services  **Drawing Name:** FLOAT SKIDTUBE ASSEMBLY

**Job Number:** 33621A  **Part Number:** D206642541

Job Number:

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 39.0 | D34131 | Ring |

**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Pick:
Qty Part Number Description Batch
1 D3413-1 Ring B32408

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 40.0 | AN4C5A | BOLT |

**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Pick:
Qty Part Number Description Batch
1 AN4C5A Bolt M18918

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 41.0 | AN960C416 | washer |

**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Pick:
Qty Part Number Description Batch
1 AN960C416 Washer M100993

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 42.0 | D2646 | Aft Cap |

**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Pick:
Qty Part Number Description Batch
1 D2646 Aft Cap B31335

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 43.0 | HAND FINISHING1 | HAND FINISHING RESOURCE #1 |

**Comment:** HAND FINISHING RESOURCE #1

2-Install wearpads & gaskets as per Dwg D3274.

3-Install ring as per Dwg D3274
A/R Sikaflex-291 M104989
Sikaflex expire date: 08-06

4-Inspect for foreign objects as per QSI 024

5-Spray inside of tube on both sides of web with LPS-3
A/R LPS-3 Batch: M105085

6-Install Aft Cap and seal with Sikaflex. Clean excess adhesive. 07-08-08

① 07-08-08



Form: rprocess

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: ________ PAR #: ______ Fault Category: ________ NCR: Yes $\boxed{\text{No}}$ DQA: RD Date: 07/08/27

QA: N/C Closed: _____ Date: ________

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

**NOTE:** Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevD

Date: Thursday, 7/19/2007 2:17:10 PM
User: Kim Johnston

# Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 33621A

Part Number: D206642541

Job Number:

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| | A/R Sikaflex-291 M10A89<br>Sikaflex expire date: 08-01 | |
| 44.0 | QC5 | INSPECT WORK TO CURRENT STEP |
| | Comment: INSPECT WORK TO CURRENT STEP | |
| 45.0 | PACKAGING 1 | PACKAGING RESOURCE #1 |
| | Comment: PACKAGING RESOURCE #1<br>Identify and stock<br>Location: C 7/8/25 | |
| 46.0 | QC21 | FINAL INSPECTION/W/O RELEASE |
| | Comment: FINAL INSPECTION/W/O RELEASE | |

Job Completion



Form: mprocess

Dart Aerospace Ltd

| W/O: | WORK ORDER CHANGES | | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

**Part No:** ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

**QA: N/C Closed:** _____ **Date:** _________

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

**NOTE:** Date & initial all entries

| DESIGN CP | DRAWN BY PH | DART AEROSPACE USA, INC. PORT HADLOCK, WA |
|---|---|---|
| CHECKED | APPROVED | DRAWING NO. D3274 REV. D SHEET 1 OF 4 |
| DATE 06.12.19 | | TITLE SKIDTUBE ASSEMBLY SCALE NTS |

DART

| | | |
|---|---|---|
| A | 04.03.15 | NEW ISSUE |
| B | 04.08.09 | MOVE SADDLE HOLE: 42.14 WAS 42.76 |
| C | 05.03.16 | ADD −043; NEW INSERTS |
| D | 06.12.19 | NEW INSERTS, SS WEARSHOE + GASKET |

RELEASED 07.02.12

| Qty -041 | Qty -043 | Part Number | Description |
|---|---|---|---|
| X | | D3274-041 | SKIDTUBE ASSEMBLY |
| | X | D3274-043 | SKIDTUBE ASSEMBLY |
| | | | |
| 1 | 1 | D2600-1-240 | EXTRUSION |
| 1 | 1 | D2646 | AFT CAP |
| 12 | 12 | D2649 | CROSS BOLT SPACER |
| 12 | 37 | D3275-1 | CROSS BOLT SPACER |
| 1 | 1 | D3282-041 | FLOAT WEB |
| 1 | 1 | D3285-1 | CAP |
| 1 | 1 | D3413-1 | RING |
| 1 | 1 | D3415-041 | NUT PLATE |
| 1 | 1 | D3535-15 | WEARSHOE |
| 1 | 1 | D3535-23 | WEARSHOE |
| 1 | 1 | D3535-35 | WEARSHOE |
| 1 | 1 | D3535-39 | WEARSHOE |
| 1 | 1 | D3536-15 | GASKET |
| 1 | 1 | D3536-23 | GASKET |
| 1 | 1 | D3536-35 | GASKET |
| 1 | 1 | D3536-39 | GASKET |
| 9 | 9 | D3537-1 | WEARPAD |
| 1 | 1 | D3537-3 | WEARPAD |
| | | | |
| 78 | 78 | ALS7-1032-130 | INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130) |
| 80 | 80 | AN3C4A | BOLT |
| 1 | 1 | AN4C5A | BOLT |
| 1 | 1 | AN960C416 | WASHER |
| 80 | 80 | AN960C10L | WASHER |
| 2 | 2 | CCR264SS3-3 | RIVET |
| 2 | 2 | CR3212-4-03 | RIVET |
| 2 | 2 | NAS1515H3L | WASHER |

**GENERAL NOTES:**

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:
   THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
   - POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

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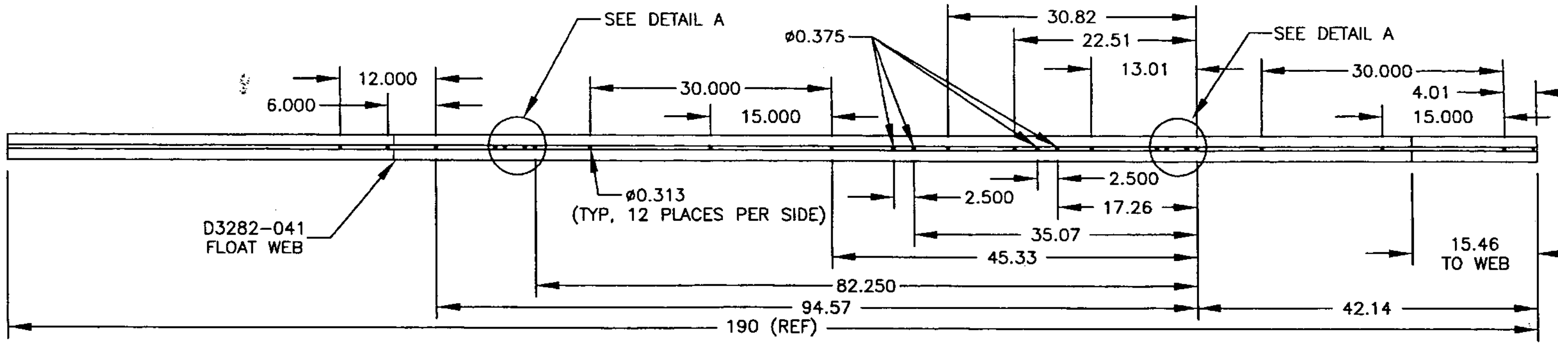
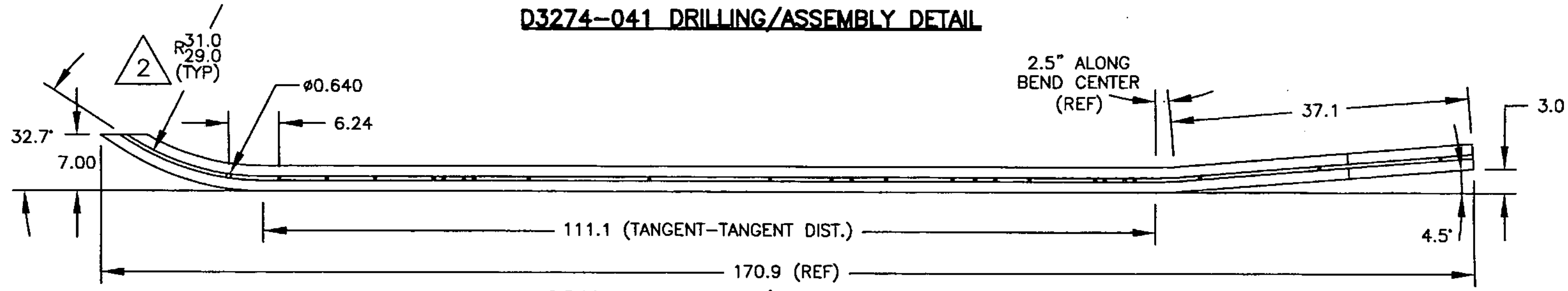
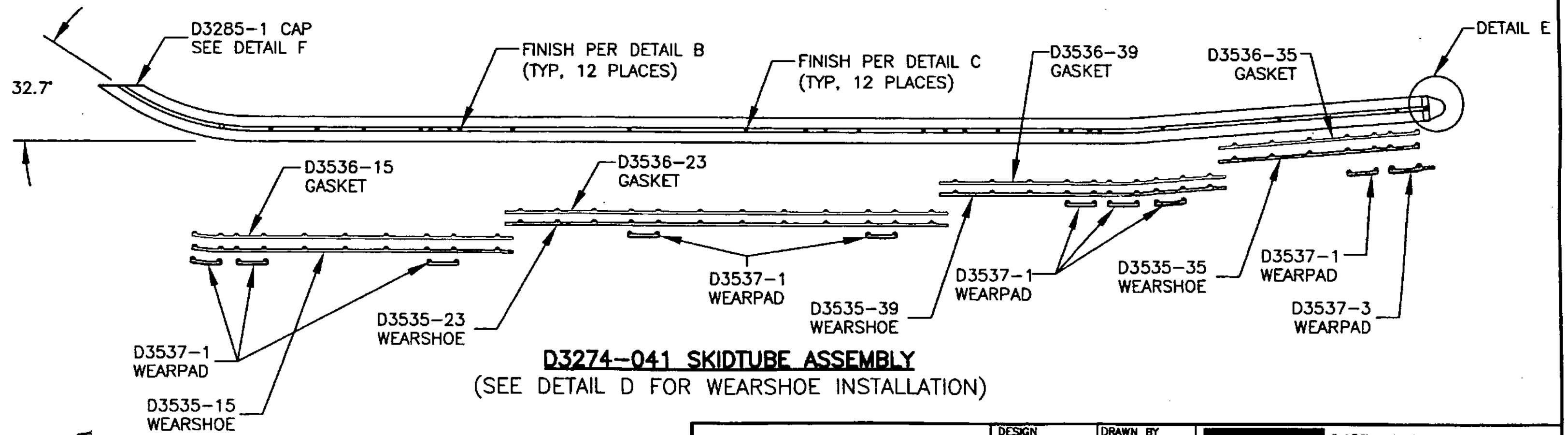
WORK ORDER NO. 33621A




**D3274-041 DRILLING/ASSEMBLY DETAIL**




**D3274-041 BEND/DRILLING DETAIL**




**D3274-041 SKIDTUBE ASSEMBLY**

(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED 07.02.12

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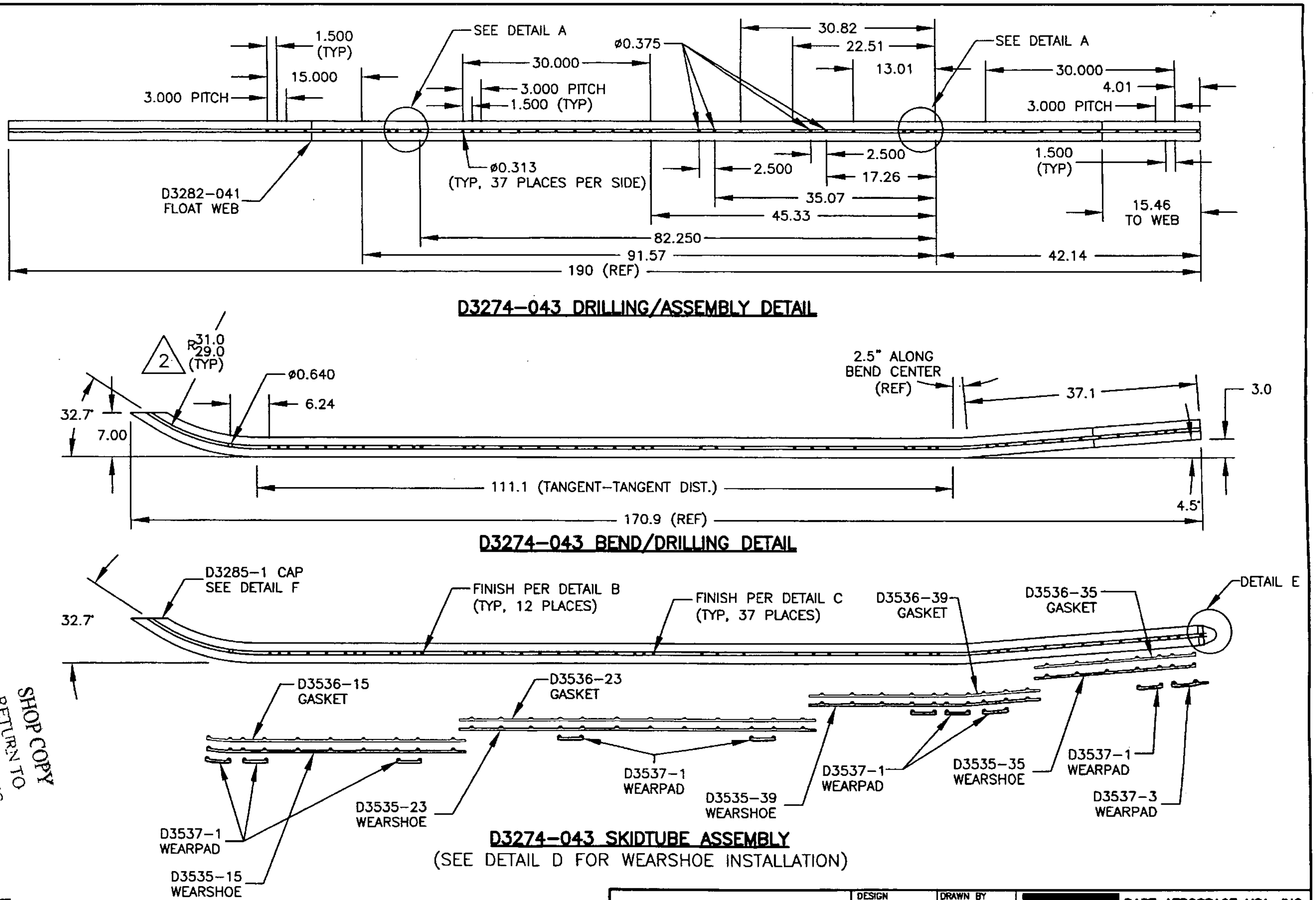
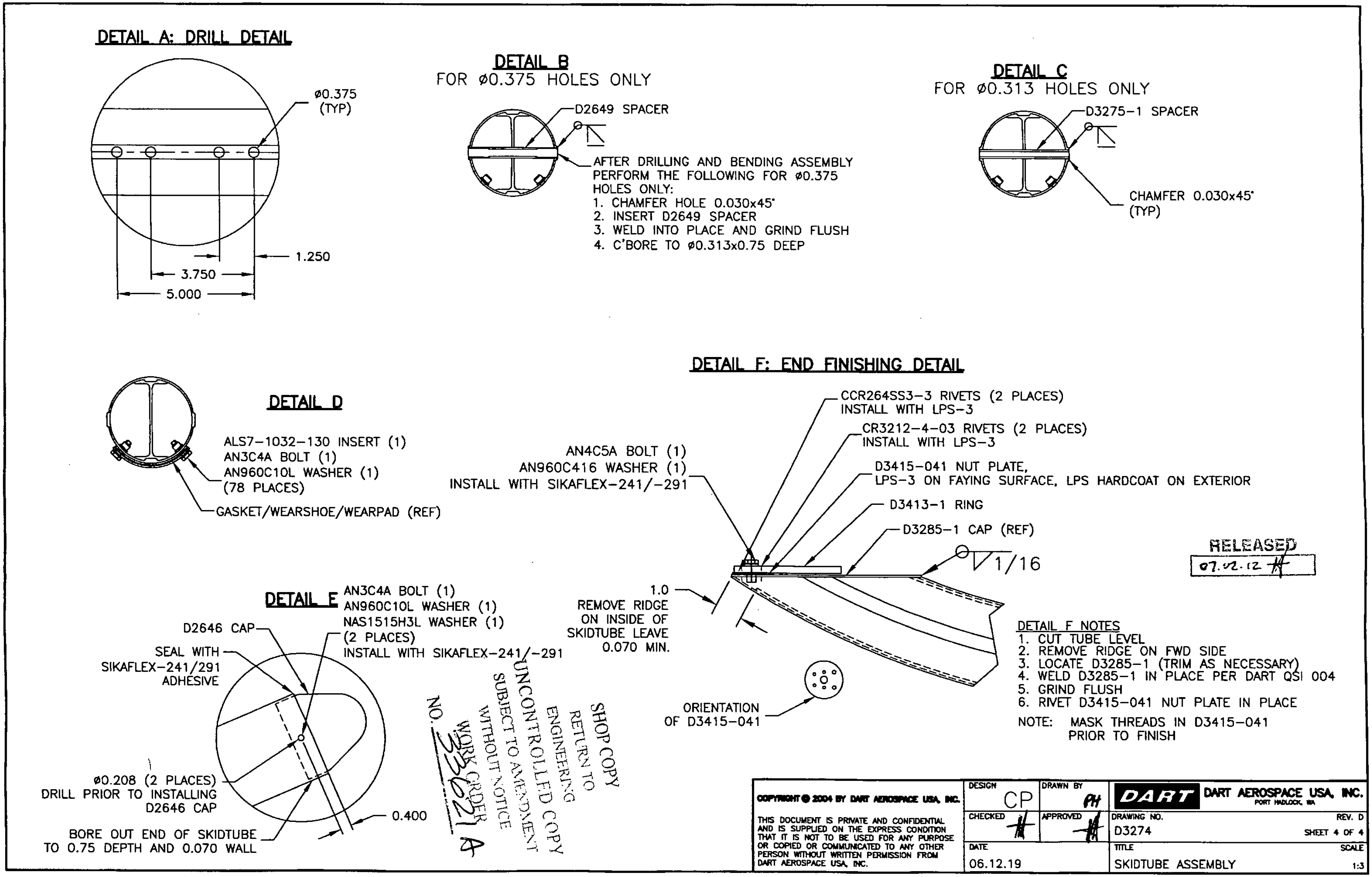
| CP | PH | |
| CHECKED | APPROVED | DRAWING NO. D3274 — REV. D — SHEET 2 OF 4 |
| DATE 06.12.19 | | TITLE SKIDTUBE ASSEMBLY — SCALE 1:15 |








| DESIGN | DRAWN BY | DART AEROSPACE USA, INC. PORT HADLOCK, WA | |
|---|---|---|---|
| CP | PH | | |
| CHECKED | APPROVED | DRAWING NO. D3274 | REV. D SHEET 3 OF 4 |
| DATE 06.12.19 | | TITLE SKIDTUBE ASSEMBLY | SCALE 1:15 |


DETAIL A: DRILL DETAIL
ø0.375
(TYP)
1.250
3.750
5.000
DETAIL B
FOR ø0.375 HOLES ONLY
D2649 SPACER
AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR ø0.375
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
2. INSERT D2649 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE TO ø0.313x0.75 DEEP
DETAIL C
FOR ø0.313 HOLES ONLY
D3275-1 SPACER
CHAMFER 0.030x45°
(TYP)
DETAIL D
ALS7-1032-130 INSERT (1)
AN3C4A BOLT (1)
AN960C10L WASHER (1)
(78 PLACES)
GASKET/WEARSHOE/WEARPAD (REF)
DETAIL F: END FINISHING DETAIL
CCR264SS3-3 RIVETS (2 PLACES)
INSTALL WITH LPS-3
CR3212-4-03 RIVETS (2 PLACES)
INSTALL WITH LPS-3
AN4C5A BOLT (1)
AN960C416 WASHER (1)
INSTALL WITH SIKAFLEX-241/-291
D3415-041 NUT PLATE,
LPS-3 ON FAYING SURFACE, LPS HARDCOAT ON EXTERIOR
D3413-1 RING
D3285-1 CAP (REF)
1/16
RELEASED
07.02.12
1.0
REMOVE RIDGE
ON INSIDE OF
SKIDTUBE LEAVE
0.070 MIN.
ORIENTATION
OF D3415-041
DETAIL F NOTES
1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE
NOTE: MASK THREADS IN D3415-041
PRIOR TO FINISH
DETAIL E
AN3C4A BOLT (1)
AN960C10L WASHER (1)
NAS1515H3L WASHER (1)
(2 PLACES)
INSTALL WITH SIKAFLEX-241/-291
D2646 CAP
SEAL WITH
SIKAFLEX-241/291
ADHESIVE
ø0.208 (2 PLACES)
DRILL PRIOR TO INSTALLING
D2646 CAP
BORE OUT END OF SKIDTUBE
TO 0.75 DEPTH AND 0.070 WALL
0.400
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UNCONTROLLED COPY
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WITHOUT NOTICE
WORK ORDER
NO. 33621A
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D3274
REV. D
SHEET 4 OF 4
TITLE
SKIDTUBE ASSEMBLY
SCALE
1:3

NO. 120

# AWS D17.1.2001

## QUALIFICATION TEST RECORD

**Name** Barclay Elliott
**Joint Welding Procedure** Tig
**Part number and Job number** 206642541 / 6336621A

## TEST WELDS REQUIRED

**BASE METAL** Alum
**Penetration** Complete [ ] Partial [✓]
**Current** AC [✓] DC [ ]

**WELDING PROCESS** Tig
**Single Weld** [✓] **Double Weld** [ ]
**Backing** YES [ ] NO [✓]

| | Position | | Vertical: Down [ ] Up [ ] | |
|---|---|---|---|---|
| **Sheet Groove** | 1G [ ] | 2G [ ] | 3G [ ] | 4G [ ] |
| **Tube Groove** | 1G [ ] | 2G [ ] | 5G [ ] | 6G [ ] |
| **Sheet Fillet** | 1F [ ] | 2F [ ] | 3F [ ] | 4F [ ] |
| **Tube Fillet** | 1F [ ] | 2F [✓] | 4F [ ] | 5F [ ] |

N/A

**Crossbolt Spacer** Welded into __________ Skidtube

## TEST RESULTS

| | | |
|---|---|---|
| **Visual** | Pass [✓] | Fail [ ] |
| **Penetration** | Pass [✓] | Fail [ ] |
| **Crossbolt Spacer** | Pass [✓] | Fail [ ] |

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

**Date of Test Coupon** 07/07/30 **Qualifier** [signature]